

## CLAIMS

1. A computer-implemented method of facilitating communication with an entity over a network, the method comprising:

- (a) associating a static HTTP URL with the entity;
- (b) linking the URL with communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and
- (c) using the URL and the communications information to facilitate communication with the entity.

2. The method of claim 1 wherein the dynamic session information includes the entity's current dynamic IP address and host box identifier.

3. The method of claim 2 wherein the dynamic session information includes the entity's TCP port number on which to be reached.

4. The method of claim 2 wherein the dynamic session information includes the entity's session ID.

5. The method of claim 1 wherein step (c) is performed by displaying a communications web page associated with the entity, the communications web page reflecting the entity's current online presence and including hyperlinks to facilitate communication with the entity based on the entity's dynamic session information.

6. The method of claim 5 wherein the communications web page is displayed as a result of the HTTP URL being typed into a web browser.

7. The method of claim 5 wherein the communications web page is displayed as a result of clicking on or otherwise activating a hyperlink associated with the HTTP URL.

8. The method of claim 1 wherein multiple forms of communication with the entity are facilitated.

9. The method of claim 8 wherein the forms of communication include type chat/instant messaging, voice communication over a computer network, video communication over a computer network, voice communication from a computer network to a telephone network and two-way text messaging to Internet enabled wireless devices.

10. The method of claim 1 wherein the static HTTP URL contains entity-selected information.

11. The method of claim 1 further comprising:

(d) associating additional, different static HTTP URLs with the entity;

(e) linking the additional URLs with the same communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and

(f) using the additional URLs and the communications information to facilitate communication with the entity.

12. A computer-implemented method of facilitating communication over a network with one or more members of a group of entities, the group comprising a plurality of entities, the method comprising:

(a) associating a static HTTP URL with the group;

(b) linking the URL with communications information reflecting each of the members' current online presence including each of the members' dynamic session information as determined using the HTTP protocol; and

(c) using the URL and the communications information to facilitate communication with one or more members of the group.

13. The method of claim 12 wherein the dynamic session information includes each of the members' current dynamic IP address and host box identifier.

14. The method of claim 13 wherein the dynamic session information includes each of the members' TCP port number on which to be reached.

15. The method of claim 13 wherein the dynamic session information includes each of the members' session ID.

16. The method of claim 12 wherein step (c) is performed by displaying a communications web page associated with the group, the communications web page reflecting each of the members' current online presence and including hyperlinks to facilitate communication with each of the members based on the members' dynamic session information.

17. The method of claim 16 wherein the communications web page is displayed as a result of the HTTP URL being typed into a web browser.

18. The method of claim 16 wherein the communications web page is displayed as a result of clicking on or otherwise activating a hyperlink associated with the HTTP URL.

19. The method of claim 12 wherein multiple forms of communication with each of the members of the group are facilitated.

20. The method of claim 19 wherein the forms of communication include type chat/instant messaging, voice communication over a computer network, video communication over a computer network, voice communication from a computer network to a telephone network and two-way text messaging to Internet enabled wireless devices.

21. The method of claim 12 wherein the static HTTP URL contains group-selected information.

22. The method of claim 12 further comprising:

(d) associating additional, different static HTTP URLs with the group;

(e) linking the additional URLs with the same communications information reflecting each of the members' current online presence including each of the members' dynamic session information as determined using the HTTP protocol; and

(f) using the additional URLs and the communications information to facilitate communication with one or more members of the group.

23. A computer-implemented method of determining the current online presence of an entity on a computer network, the method comprising:

(a) associating a static HTTP URL with the entity;

(b) linking the URL with communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and

(c) determining the current online presence of the entity using the URL and the communications information.

24. The method of claim 23 wherein the dynamic session information includes the entity's current dynamic IP address and host box identifier.

25. The method of claim 24 wherein the dynamic session information includes the entity's TCP port number on which to be reached.

26. The method of claim 24 wherein the dynamic session information includes the entity's session ID.

27. The method of claim 23 wherein the static HTTP URL contains entity-selected information.

28. A computer-implemented method for detecting and maintaining an entity's current online presence on a computer network, the network including a host computer, the method comprising:

(a) sending an HTTP request from the entity to the host computer to initiate an HTTP connection between the entity and the host computer;

(b) receiving the request at the host computer and opening and maintaining a socket for the HTTP connection with the entity in a non-blocking manner without creating a new thread for the HTTP connection; and

(c) sending at least one byte of data from the host computer to the socket at a specified interval to keep open the HTTP connection with the entity.

29. The method of claim 28 further comprising:

(d) checking the online status of the entity by polling the socket at a second specified interval to determine if the socket is open and deciding that the entity is still online if the socket is open and that the entity has gone offline if the socket is no longer open.

30. The method of claim 29 wherein the second specified interval is 4 seconds.

31. The method of claim 28 wherein the specified interval is one minute.

32. The method of claim 28 wherein the specified interval is two minutes.

33. The method of claim 28 wherein the HTTP request is a GET request.

34. The method of claim 28 further comprising:

(d) closing the socket at the host computer upon receiving a message from the entity that it is logging off of the network.

35. A computer-implemented method for detecting and maintaining the current online presence on a computer network of a plurality of entities, the network including a host computer, the method comprising:

(a) receiving a request at the host computer from one of the plurality of entities to establish an HTTP connection;

(b) opening and maintaining a socket for the HTTP connection in a non-blocking manner, the socket having a socket file descriptor, with the one of the plurality of entities without creating a new thread for the HTTP connection;

(c) adding the socket file descriptor to a socket database, the socket database maintaining a list of open sockets with those of the plurality of entities that are currently online; and

(d) sending at least one byte of data from the host computer to the open sockets in the socket database at a specified interval to keep open the HTTP connections with the plurality of entities.

36. The method of claim 35 further comprising:

(e) checking the online status of the plurality of entities by polling the open sockets in the socket database at a second specified interval to determine if the open sockets are open and deciding that each of the plurality of entities is still online if its corresponding socket is open and that each of the plurality of entities has gone offline if its corresponding socket is no longer open.

37. The method of claim 36 wherein the second specified interval is 4 seconds.

38. The method of claim 35 wherein the specified interval is one minute.

39. The method of claim 35 wherein the specified interval is two minutes.

40. The method of claim 35 further comprising:

(e) closing a socket at the host computer upon receiving a message from a corresponding one of the plurality of entities that it is logging off of the network; and

(f) removing the socket from the socket database.

41. A computer-implemented method of sending text messages from a first entity to a second entity over a network using HTTP, the network including a host computer, the method comprising:

(a) establishing and maintaining a socket and an HTTP connection between the second entity and the host computer;

(b) sending a text message from the first entity to the host computer to be delivered to the second entity;

(c) sending the text message to the second entity from the host computer using the socket and the HTTP connection.

42. The method of claim 41 wherein step (b) is performed by:

(i) establishing and maintaining a second socket and a second HTTP connection between the first entity and the host computer; and

(ii) sending the text message from the first entity to the host computer using the second socket and the second HTTP connection.

43. The method of claim 42 wherein a reply message is sent from the second entity to the first entity, the method further comprising:

(d) sending a reply message from the second entity to the host computer using the socket and the HTTP connection; and

(e) sending the reply message from the host computer to the first entity using the second socket and the second HTTP connection.

44. The method of claim 41 further comprising:

(d) displaying the text message on the second entity.

45. A computer-implemented method of transporting SIP messages from a first entity to a second entity over a network, the network including a host computer, the method comprising:

(a) establishing and maintaining a socket and an HTTP connection between the second entity and the host computer;

(b) sending a SIP message from the first entity to the host computer to be delivered to the second entity;

(c) sending the SIP message to the second entity from the host computer using the socket.

46. The method of claim 45 further comprising:

(d) sending a reply to the SIP message from the second entity to the host computer using an HTTP request.

47. A computer-implemented method of sending text messages from an entity to an Internet enabled wireless device over a network, the network including a host computer, the method comprising:

(a) sending a communications request to the Internet enabled wireless device from the host computer that includes an URL identifying the host computer;

(b) establishing and maintaining a socket and an HTTP connection between the Internet enabled wireless device and the host computer using the URL;

(c) sending a text message from the entity to the host computer to be delivered to the Internet enabled wireless device;

(d) sending the text message to the Internet enabled wireless device from the host computer using the socket and the HTTP connection.

48. The method of claim 47 wherein step (c) is performed by:

(i) establishing and maintaining a second socket and a second HTTP connection between the entity and the host computer; and

(ii) sending the text message from the entity to the host computer using the second socket and the second HTTP connection.

49. The method of claim 48 wherein a reply message is sent from the Internet enabled wireless device to the entity, the method further comprising:

(e) sending a reply message from the Internet enabled wireless device to the host computer using the socket and the HTTP connection; and

(f) sending the reply message from the host computer to the entity using the second socket and the second HTTP connection.

50. The method of claim 47 further comprising:

(d) displaying the text message on the Internet enabled wireless device.



51. An article of manufacture for facilitating communication with an entity over a network, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

- (a) associating a static HTTP URL with the entity;
- (b) linking the URL with communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and
- (c) using the URL and the communications information to facilitate communication with the entity.

52. The article of manufacture of claim 51 wherein the dynamic session information includes the entity's current dynamic IP address and host box identifier.

53. The article of manufacture of claim 52 wherein the dynamic session information includes the entity's TCP port number on which to be reached.

54. The article of manufacture of claim 52 wherein the dynamic session information includes the entity's session ID.

55. The article of manufacture of claim 51 wherein step (c) is performed by displaying a communications web page associated with the entity, the communications web page reflecting the entity's current online presence and including hyperlinks to facilitate communication with the entity based on the entity's dynamic session information.

56. The article of manufacture of claim 55 wherein the communications web page is displayed as a result of the HTTP URL being typed into a web browser.

57. The article of manufacture of claim 55 wherein the communications web page is displayed as a result of clicking on or otherwise activating a hyperlink associated with the HTTP URL.

58. The article of manufacture of claim 51 wherein multiple forms of communication with the entity are facilitated.

59. The article of manufacture of claim 58 wherein the forms of communication include type chat/instant messaging, voice communication over a computer network, video communication over a computer network, voice communication from a computer network to a telephone network and two-way text messaging to Internet enabled wireless devices.

60. The article of manufacture of claim 51 wherein the static HTTP URL contains entity-selected information.

61. The article of manufacture of claim 51 wherein the computer-executable instructions perform a method further comprising:

- (d) associating additional, different static HTTP URLs with the entity;
- (e) linking the additional URLs with the same communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and
- (f) using the additional URLs and the communications information to facilitate communication with the entity.

62. An article of manufacture for facilitating communication over a network with one or more members of a group of entities, the group comprising a plurality of entities, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

- (a) associating a static HTTP URL with the group;
- (b) linking the URL with communications information reflecting each of the members' current online presence including each of the members' dynamic session information as determined using the HTTP protocol; and
- (c) using the URL and the communications information to facilitate communication with one or more members of the group.

63. The article of manufacture of claim 62 wherein the dynamic session information includes each of the members' current dynamic IP address and host box identifier.

64. The article of manufacture of claim 63 wherein the dynamic session information includes each of the members' TCP port number on which to be reached.

65. The article of manufacture of claim 63 wherein the dynamic session information includes each of the members' session ID.

66. The article of manufacture of claim 62 wherein step (c) is performed by displaying a communications web page associated with the group, the communications web page reflecting each of the members' current online presence and including hyperlinks to facilitate communication with each of the members based on the members' dynamic session information.

67. The article of manufacture of claim 66 wherein the communications web page is displayed as a result of the HTTP URL being typed into a web browser.

68. The article of manufacture of claim 66 wherein the communications web page is displayed as a result of clicking on or otherwise activating a hyperlink associated with the HTTP URL.

69. The article of manufacture of claim 62 wherein multiple forms of communication with each of the members of the group are facilitated.

70. The article of manufacture of claim 69 wherein the forms of communication include type chat/instant messaging, voice communication over a computer network, video communication over a computer network, voice communication from a computer network to a telephone network and two-way text messaging to Internet enabled wireless devices.

71. The article of manufacture of claim 62 wherein the static HTTP URL contains group-selected information.

72. The article of manufacture of claim 62 wherein the computer-executable instructions perform a method further comprising:

- (d) associating additional, different static HTTP URLs with the group;
- (e) linking the additional URLs with the same communications information reflecting each of the members' current online presence including each of the members' dynamic session information as determined using the HTTP protocol; and
- (f) using the additional URLs and the communications information to facilitate communication with one or more members of the group.

73. An article of manufacture for determining the current online presence of an entity on a computer network, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

- (a) associating a static HTTP URL with the entity;
- (b) linking the URL with communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and
- (c) determining the current online presence of the entity using the URL and the communications information.

74. The article of manufacture of claim 73 wherein the dynamic session information includes the entity's current dynamic IP address and host box identifier.

75. The article of manufacture of claim 74 wherein the dynamic session information includes the entity's TCP port number on which to be reached.

76. The article of manufacture of claim 74 wherein the dynamic session information includes the entity's session ID.

77. The article of manufacture of claim 73 wherein the static HTTP URL contains entity-selected information.

78. An article of manufacture for detecting and maintaining an entity's current online presence on a computer network, the network including a host computer, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

(a) sending an HTTP request from the entity to the host computer to initiate an HTTP connection between the entity and the host computer;

(b) receiving the request at the host computer and opening and maintaining a socket for the HTTP connection with the entity in a non-blocking manner without creating a new thread for the HTTP connection; and

(c) sending at least one byte of data from the host computer to the socket at a specified interval to keep open the HTTP connection with the entity.

79. The article of manufacture of claim 78 wherein the computer-executable instructions perform a method further comprising:

(d) checking the online status of the entity by polling the socket at a second specified interval to determine if the socket is open and deciding that the entity is still online if the socket is open and that the entity has gone offline if the socket is no longer open.

80. The article of manufacture of claim 79 wherein the second specified interval is 4 seconds.

81. The article of manufacture of claim 78 wherein the specified interval is one minute.

82. The article of manufacture of claim 78 wherein the specified interval is two minutes.

83. The article of manufacture of claim 78 wherein the HTTP request is a GET request.

84. The article of manufacture of claim 78 wherein the computer-executable instructions perform a method further comprising:

(d) closing the socket at the host computer upon receiving a message from the entity that it is logging off of the network.

85. An article of manufacture for detecting and maintaining the current online presence on a computer network of a plurality of entities, the network including a host computer, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

(a) receiving a request at the host computer from one of the plurality of entities to establish an HTTP connection;

(b) opening and maintaining a socket for the HTTP connection in a non-blocking manner, the socket having a socket file descriptor, with the one of the plurality of entities without creating a new thread for the HTTP connection;

(c) adding the socket file descriptor to a socket database, the socket database maintaining a list of open sockets with those of the plurality of entities that are currently online; and

(d) sending at least one byte of data from the host computer to the open sockets in the socket database at a specified interval to keep open the HTTP connections with the plurality of entities.

86. The article of manufacture of claim 85 wherein the computer-executable instructions perform a method further comprising:

(e) checking the online status of the plurality of entities by polling the open sockets in the socket database at a second specified interval to determine if the open sockets are open and deciding that each of the plurality of entities is still online if its corresponding socket is open and that each of the plurality of entities has gone offline if its corresponding socket is no longer open.

87. The article of manufacture of claim 86 wherein the second specified interval is 4 seconds.

88. The article of manufacture of claim 85 wherein the specified interval is one minute.

89. The article of manufacture of claim 85 wherein the specified interval is two minutes.

90. The article of manufacture of claim 85 wherein the computer-executable instructions perform a method further comprising:

- (e) closing a socket at the host computer upon receiving a message from a corresponding one of the plurality of entities that it is logging off of the network; and
- (f) removing the socket from the socket database.

91. An article of manufacture for sending text messages from a first entity to a second entity over a network using HTTP, the network including a host computer, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

- (a) establishing and maintaining a socket and an HTTP connection between the second entity and the host computer;
- (b) sending a text message from the first entity to the host computer to be delivered to the second entity;
- (c) sending the text message to the second entity from the host computer using the socket and the HTTP connection.

92. The article of manufacture of claim 91 wherein step (b) is performed by:

- (i) establishing and maintaining a second socket and a second HTTP connection between the first entity and the host computer; and
- (ii) sending the text message from the first entity to the host computer using the second socket and the second HTTP connection.

93. The article of manufacture of claim 92 wherein a reply message is sent from the second entity to the first entity, the computer-executable instructions performing a method further comprising:

- (d) sending a reply message from the second entity to the host computer using the socket and the HTTP connection; and
- (e) sending the reply message from the host computer to the first entity using the second socket and the second HTTP connection.

94. The article of manufacture of claim 91 wherein the computer-executable instructions perform a method further comprising:

(d) displaying the text message on the second entity.

95. An article of manufacture for transporting SIP messages from a first entity to a second entity over a network, the network including a host computer, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

(a) establishing and maintaining a socket and an HTTP connection between the second entity and the host computer;

(b) sending a SIP message from the first entity to the host computer to be delivered to the second entity;

(c) sending the SIP message to the second entity from the host computer using the socket.

96. The article of manufacture of claim 95 wherein the computer-executable instructions perform a method further comprising:

(d) sending a reply to the SIP message from the second entity to the host computer using an HTTP request.

97. An article of manufacture for sending text messages from an entity to an Internet enabled wireless device over a network, the network including a host computer, the article of manufacture comprising a computer-readable medium holding computer-executable instructions for performing a method comprising:

(a) sending a communications request to the Internet enabled wireless device from the host computer that includes an URL identifying the host computer;

(b) establishing and maintaining a socket and an HTTP connection between the Internet enabled wireless device and the host computer using the URL;

(c) sending a text message from the entity to the host computer to be delivered to the Internet enabled wireless device;



(d) sending the text message to the Internet enabled wireless device from the host computer using the socket and the HTTP connection.

98. The article of manufacture of claim 97 wherein step (c) is performed by:

(i) establishing and maintaining a second socket and a second HTTP connection between the entity and the host computer; and

(ii) sending the text message from the entity to the host computer using the second socket and the second HTTP connection.

99. The article of manufacture of claim 98 wherein a reply message is sent from the Internet enabled wireless device to the entity, the computer-executable instructions performing a method further comprising:

(e) sending a reply message from the Internet enabled wireless device to the host computer using the socket and the HTTP connection; and

(f) sending the reply message from the host computer to the entity using the second socket and the second HTTP connection.

100. The article of manufacture of claim 97 wherein the computer-executable instructions perform a method further comprising:

(d) displaying the text message on the Internet enabled wireless device.

101. A computer-implemented apparatus for facilitating communication with an entity over a network, the apparatus comprising:

(a) means for associating a static HTTP URL with the entity;

(b) means for linking the URL with communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and

(c) means for using the URL and the communications information to facilitate communication with the entity.

102. The apparatus according to claim 101 wherein the dynamic session information includes the entity's current dynamic IP address and host box identifier.

103. The apparatus according to claim 102 wherein the dynamic session information includes the entity's TCP port number on which to be reached.

104. The apparatus according to claim 102 wherein the dynamic session information includes the entity's session ID.

105. The apparatus according to claim 101 wherein the means for using the URL and the communications information comprise means for displaying a communications web page associated with the entity, the communications web page reflecting the entity's current online presence and including hyperlinks to facilitate communication with the entity based on the entity's dynamic session information.

106. The apparatus according to claim 105 wherein the communications web page is displayed as a result of the HTTP URL being typed into a web browser.

107. The apparatus according to claim 105 wherein the communications web page is displayed as a result of clicking on or otherwise activating a hyperlink associated with the HTTP URL.

108. The apparatus according to claim 101 wherein multiple forms of communication with the entity are facilitated.

109. The apparatus according to claim 108 wherein the forms of communication include type chat/instant messaging, voice communication over a computer network, video communication over a computer network, voice communication from a computer network to a telephone network and two-way text messaging to Internet enabled wireless devices.

110. The apparatus according to claim 101 wherein the static HTTP URL contains entity-selected information.

111. The apparatus according to claim 101 further comprising:

- (d) means for associating additional, different static HTTP URLs with the entity;
- (e) means for linking the additional URLs with the same communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and
- (f) means for using the additional URLs and the communications information to facilitate communication with the entity.

112. A computer-implemented apparatus for facilitating communication over a network with one or more members of a group of entities, the group comprising a plurality of entities, the apparatus comprising:

- (a) means for associating a static HTTP URL with the group;
- (b) means for linking the URL with communications information reflecting each of the members' current online presence including each of the members' dynamic session information as determined using the HTTP protocol; and
- (c) means for using the URL and the communications information to facilitate communication with one or more members of the group.

113. The apparatus according to claim 112 wherein the dynamic session information includes each of the members' current dynamic IP address and host box identifier.

114. The apparatus according to claim 113 wherein the dynamic session information includes each of the members' TCP port number on which to be reached.

115. The apparatus according to claim 113 wherein the dynamic session information includes each of the members' session ID.

116. The apparatus according to claim 112 wherein the means for using the URL and the communications information comprise means for displaying a communications web page associated with the group, the communications web page reflecting each of the members' current online presence and including hyperlinks to facilitate communication with each of the members based on the members' dynamic session information.

117. The apparatus according to claim 116 wherein the communications web page is displayed as a result of the HTTP URL being typed into a web browser.

118. The apparatus according to claim 116 wherein the communications web page is displayed as a result of clicking on or otherwise activating a hyperlink associated with the HTTP URL.

119. The apparatus according to claim 112 wherein multiple forms of communication with each of the members of the group are facilitated.

120. The apparatus according to claim 119 wherein the forms of communication include type chat/instant messaging, voice communication over a computer network, video communication over a computer network, voice communication from a computer network to a telephone network and two-way text messaging to Internet enabled wireless devices.

121. The apparatus according to claim 112 wherein the static HTTP URL contains group-selected information.

122. The apparatus according to claim 112 further comprising:

- (d) means for associating additional, different static HTTP URLs with the group;
- (e) means for linking the additional URLs with the same communications information reflecting each of the members' current online presence including each of the members' dynamic session information as determined using the HTTP protocol; and
- (f) means for using the additional URLs and the communications information to facilitate communication with one or more members of the group.

123. A computer-implemented apparatus for determining the current online presence of an entity on a computer network, the apparatus comprising:

- (a) means for associating a static HTTP URL with the entity;
- (b) means for linking the URL with communications information reflecting the entity's current online presence including the entity's dynamic session information as determined using the HTTP protocol; and
- (c) means for determining the current online presence of the entity using the URL and the communications information.

124. The apparatus according to claim 123 wherein the dynamic session information includes the entity's current dynamic IP address and host box identifier.

125. The apparatus according to claim 124 wherein the dynamic session information includes the entity's TCP port number on which to be reached.

126. The apparatus according to claim 124 wherein the dynamic session information includes the entity's session ID.

127. The apparatus according to claim 123 wherein the static HTTP URL contains entity-selected information.

128. A computer-implemented apparatus for detecting and maintaining an entity's current online presence on a computer network, the network including a host computer, the apparatus comprising:

- (a) means for sending an HTTP request from the entity to the host computer to initiate an HTTP connection between the entity and the host computer;
- (b) means for receiving the request at the host computer and opening and maintaining a socket for the HTTP connection with the entity in a non-blocking manner without creating a new thread for the HTTP connection; and

(c) means for sending at least one byte of data from the host computer to the socket at a specified interval to keep open the HTTP connection with the entity.

129. The apparatus according to claim 128 further comprising:

(d) means for checking the online status of the entity by polling the socket at a second specified interval to determine if the socket is open and deciding that the entity is still online if the socket is open and that the entity has gone offline if the socket is no longer open.

130. The apparatus according to claim 129 wherein the second specified interval is 4 seconds.

131. The apparatus according to claim 128 wherein the specified interval is one minute.

132. The apparatus according to claim 128 wherein the specified interval is two minutes.

133. The apparatus according to claim 128 wherein the HTTP request is a GET request.

134. The apparatus according to claim 128 further comprising:

(d) means for closing the socket at the host computer upon receiving a message from the entity that it is logging off of the network.

135. A computer-implemented apparatus for detecting and maintaining the current online presence on a computer network of a plurality of entities, the network including a host computer, the apparatus comprising:

(a) means for receiving a request at the host computer from one of the plurality of entities to establish an HTTP connection;

(b) means for opening and maintaining a socket for the HTTP connection in a non-blocking manner, the socket having a socket file descriptor, with the one of the plurality of entities without creating a new thread for the HTTP connection;

(c) means for adding the socket file descriptor to a socket database, the socket database maintaining a list of open sockets with those of the plurality of entities that are currently online; and

(d) means for sending at least one byte of data from the host computer to the open sockets in the socket database at a specified interval to keep open the HTTP connections with the plurality of entities.

136. The apparatus according to claim 135 further comprising:

(e) means for checking the online status of the plurality of entities by polling the open sockets in the socket database at a second specified interval to determine if the open sockets are open and deciding that each of the plurality of entities is still online if its corresponding socket is open and that each of the plurality of entities has gone offline if its corresponding socket is no longer open.

137. The apparatus according to claim 136 wherein the second specified interval is 4 seconds.

138. The apparatus according to claim 135 wherein the specified interval is one minute.

139. The apparatus according to claim 135 wherein the specified interval is two minutes.

140. The apparatus according to claim 135 further comprising:

(e) means for closing a socket at the host computer upon receiving a message from a corresponding one of the plurality of entities that it is logging off of the network; and

(f) means for removing the socket from the socket database.

141. A computer-implemented apparatus for sending text messages from a first entity to a second entity over a network using HTTP, the network including a host computer, the apparatus comprising:

(a) means for establishing and maintaining a socket and an HTTP connection between the second entity and the host computer;

(b) means for sending a text message from the first entity to the host computer to be delivered to the second entity;

(c) means for sending the text message to the second entity from the host computer using the socket and the HTTP connection.

142. The apparatus according to claim 141 wherein the means for sending a text message from the first entity to the host computer comprise:

(i) means for establishing and maintaining a second socket and a second HTTP connection between the first entity and the host computer; and

(ii) means for sending the text message from the first entity to the host computer using the second socket and the second HTTP connection.

143. The apparatus according to claim 142 wherein a reply message is sent from the second entity to the first entity, the apparatus further comprising:

(d) means for sending a reply message from the second entity to the host computer using the socket and the HTTP connection; and

(e) means for sending the reply message from the host computer to the first entity using the second socket and the second HTTP connection.

144. The apparatus according to claim 141 further comprising:

(d) means for displaying the text message on the second entity.

145. A computer-implemented apparatus for transporting SIP messages from a first entity to a second entity over a network, the network including a host computer, the apparatus comprising:

(a) means for establishing and maintaining a socket and an HTTP connection between the second entity and the host computer;

(b) means for sending a SIP message from the first entity to the host computer to be delivered to the second entity;

(c) means for sending the SIP message to the second entity from the host computer using the socket.



146. The apparatus according to claim 145 further comprising:

(d) means for sending a reply to the SIP message from the second entity to the host computer using an HTTP request.

147. A computer-implemented apparatus for sending text messages from an entity to an Internet enabled wireless device over a network, the network including a host computer, the apparatus comprising:

(a) means for sending a communications request to the Internet enabled wireless device from the host computer that includes an URL identifying the host computer;

(b) means for establishing and maintaining a socket and an HTTP connection between the Internet enabled wireless device and the host computer using the URL;

(c) means for sending a text message from the entity to the host computer to be delivered to the Internet enabled wireless device;

(d) means for sending the text message to the Internet enabled wireless device from the host computer using the socket and the HTTP connection.

148. The apparatus according to claim 147 wherein the means for sending a text message from the entity to the host computer comprise:

(i) means for establishing and maintaining a second socket and a second HTTP connection between the entity and the host computer; and

(ii) means for sending the text message from the entity to the host computer using the second socket and the second HTTP connection.

149. The apparatus according to claim 148 wherein a reply message is sent from the Internet enabled wireless device to the entity, the apparatus further comprising:

(e) means for sending a reply message from the Internet enabled wireless device to the host computer using the socket and the HTTP connection; and

(f) means for sending the reply message from the host computer to the entity using the second socket and the second HTTP connection.

[illegible][illegible]